

About Enhancing Academic Competence

Wolfensberger (2012) formulated, based on her research, the *three pillars of Honors Pedagogy*: creating a community, enhancing academic competence, and offering freedom. This document concentrates on the second pillar ‘enhancing academic competence’, concerning teaching strategies “... that enhance the depth and scope of students’ academic knowledge, understanding and skills” (Wolfensberger, 2012, p. 22).

A large scale American study shows that several factors influence the enhancement of academic competence. The support provided to students, the opportunity for cognitive engagement through analysis, synthesis, and evaluation, the implementation of information and ideas, and having interactions with others with different views, beliefs, or backgrounds were all found to contribute to academic competence (Reason, et al., 2006). Critical and reflective thinking (e.g., Corley & Zubizarreta, 2012), which resembles cognitive engagement, and crossing disciplinary boundaries (e.g., Lopez Chavez & Shepherd, 2010; Robinson, 1997), which resembles diverse interactions, have also been linked to academic competence.

Honors programs typically offer enhanced academic challenges (Hebert & McBee, 2007). Key literature indicates the importance of increasing the level of challenge for high-ability or honors students, as this creates a more optimal learning environment for these students (Kanevsky & Keighley, 2003; Mullet, et al., 2018). As Wolfensberger (2012, p.32) showed in her literature review “Compared to regular programs, the gifted curriculum promotes accelerated learning, depth, creativity, complexity and challenge.” This has also been observed earlier by Robinson (1997), who referred to the difference in depth and intensity of honors vs. regular programs and the emphasis on concepts instead of on procedures.

Such a different program meets the needs of honors students, who are often quicker thinkers, more flexible in their use of strategies, academically confident, more intellectually interested, who have better memorization skills, and who prefer complexity (Shore & Kanevsky, 1993; Kaczvinsky, 2007). As a director of an honors program, Mack (1996) describes his view on honors education. He believes that honors programs can support students “to think broadly as well as narrowly, generally as well as professionally” (Mack, 1996, p38). This implies supporting critical, reflective thinking, and looking beyond disciplinary borders (Mack, 1996).

Importance of ‘Enhancing Academic Competence’ in honors

In their review study, Reis & Renzulli (2010) found that to improve talented students’ achievements, enrichment, differentiation, acceleration, and curriculum enhancement is imperative. The use of such strategies may increase the level of challenge in the course and result in a better balance between challenge and ability for talented students. When a learner’s challenge level matches his/her ability level, this will have positive effects on the learner’s motivation and learning (Csikszentmihalyi, 1975; Ryan & Deci, 2000). According to the self-determination theory, ‘optimal challenge’ is important for motivation. Ryan and Deci (2000; 2017) express this in the need for competence – the need to control the outcome and experience mastery. Competence is one of three innate needs that, if satisfied, improve intrinsic motivation and allow for optimal functioning and growth. Moreover, the ‘flow-model’ of Csikszentmihalyi (Csikszentmihalyi, 1975; Csikszentmihalyi, et al., 2014) shows the importance of balance between challenge and skills.

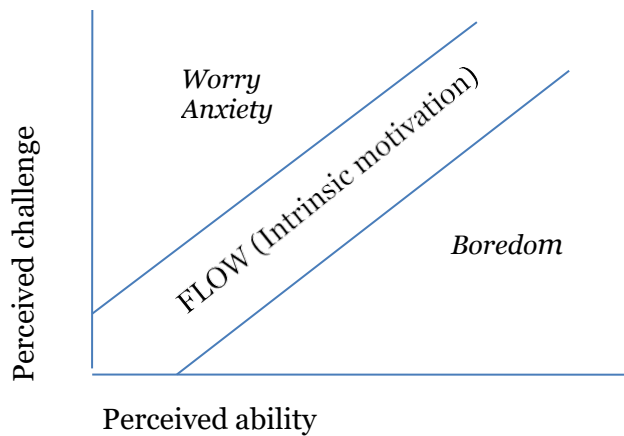


Figure 1 Flow Model (Scager, 2014)

Csikszentmihalyi (1975) assumes that when challenge is in optimal balance with ability, a state of flow can be achieved. Flow is a state of intrinsic motivation in which people are fully engaged in a task. Experiencing flow is associated with positive outcomes such as improved performance (Nakamura and Csikszentmihalyi, 2008; Engeser & Rheinberg, 2008; Klein, et al., 2010; Vollmeyer & Rheinberg, 2006) and the same holds for intrinsic motivation (Kappe & Van der Flier, 2012; Kusurkar et al., 2013).

As long as the level of challenge is at or just above the ability level of the learner, learning and intrinsic motivation go together. Honors students often do not feel enough challenge in their regular program and honors education and teachers are important for improving the balance between ability and challenge level (Scager et al., 2014).

Teaching behaviors that contribute to ‘Enhancing Academic Competence’

The research of Wolfensberger (2012; 2014) resulted in three clusters of teaching strategies that can enhance Academic Competence:

- Strategies for providing context, both academic and social, and supporting connective thinking.
- Strategies that support development of in-depth analytical thinking and of research skills.
- The range of strategies that create challenge, both in quality (difficulty, complexity) and in quantity (pacing, size of tasks).

Based on a literature search and the research of Wolfensberger (2012), several teaching behaviors were formulated, listed in Table 1. In her work, Wolfensberger (2012) stresses the importance of cross-disciplinary collaboration between teachers for the support of academic competence. Moreover, teachers should implement this as well in their teaching, thus ensuring that their students come into contact with various perspectives and expertise when working on a task (cf. Draper et al., 1999).

Tabel 1 Teaching Behaviors to Enhance Academic Competence

Stimulating critical thinking skills
Stimulating independent thinking skills
Setting challenging tasks and assignments
Stimulating students to think in a creative way

Stimulating academic depth
Placing different points of view opposite to each other
Making connections with other professional domains
Making the honours courses exciting
Teaching students how they can apply knowledge in real situations
Using suitable methods to assess honours students
Finding it important that students are intensively involved in research
Using suitable methods to evaluate honours education

In a recent study, honors teachers in America and in The Netherlands indicated that, according to them, all the behavioral aspects shown in Table 1 are essential for teaching in honors. The greatest consensus was for ‘stimulating critical thinking skills’ and ‘stimulating independent thinking skills’ (Heijne-Penninga et al, in preparation). Stimulating students seems to be an important teaching behavior in honors, and ‘stimulating students to think in a creative way’ and ‘stimulating academic depth’ in particular are on the top of this list. Additionally, ‘setting challenging tasks and assignments’ is perceived by most of the experienced teachers as essential for honors.

Stimulating critical and independent thinking skills

Although honors students are found to be intelligent and quick thinkers (Shore & Kanevsky, 1993; Kacvinsky, 2007) they are not automatically able to think critically (Cargas, 2016). They need support and guidance from their teachers to become critical thinkers. Critical thinking abilities are essential for this and it is generally agreed upon that these abilities include interpretation, analysis, evaluation, inference, explanation, and self-regulation (Facione, 1990; Robertson & Rane-Szostak, 2001).

Research on how to teach critical thinking is ongoing (Cargas, 2016). In a study of Robertson & Rane-Szostak (2001), students indicated that working in the same collaborative group, writing an issue paper, and participating in group debates were most helpful for increasing critical thinking. Furthermore, an exercise in which some students are given roles in a group discussion and other students observed the discussion (specifically the critical thinking abilities, errors in thinking, and the impact of different roles on the group discussion), was seen as supportive in increasing the development of critical thinking skills (Robertson & Rane-Szostak, 2001; Robertson & Rane-Szostak, 1996). Cargas (2016) indicates that it is important to name critical thinking explicitly as a learning objective and to share definitions of critical thinking with students in class. The Complex Thinking Assessment Instrument (Wood-Nartker, Hinck & Hullender, 2016) can help to describe students’ growth in complex thinking skills. Additionally, essays based on independent research, writing that requires analysis, and writing which includes various perspectives on an issue require more complex thinking (Tsui, 1999 & 2002). Analyzing controversial issues in honors allows teachers to use all the techniques of critical thinking (Cargas, 2016).

It is important to remember that students cannot learn critical thinking in just one class. Rather, it is an ability that they have to practice throughout their whole career (Cargas, 2016)

Setting challenging tasks and assignments

Setting challenging tasks and assignments is also seen as essential for teaching in honors, and is a strategy to enhance academic competence (Niemic & Ryan, 2009). Students often indicate that a lack of challenge is caused by a slow learning pace, too much repetition of already mastered information, the inability to move on after mastering the regular curriculum, few opportunities to study topics of

personal interest, and an emphasis on the mastery of facts rather than the use of thinking skills (Gallagher, et al., 1997; Kanevsky & Keighley, 2003; Mullet, et al., 2018).

According to students, they experience challenge when they are given complex assignments with little structure and a lack of guidance, complemented by the ability to exert choice and control over their learning and independence. Students also indicate a desire for heavy workloads and fast paced learning (Mullet, et al., 2018). From their teacher, they expect him/her to care and have high expectations (Kanevsky and Keighly, 2003; Mullet et al., 2018; Scager, et al., 2014). Authentic learning, multidisciplinary issues, and supervisors with considerable knowledge who gave space and little support and reflection as part of the assignment all seem to be important ways to create challenging tasks and assignments (Bormans, 2015).

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